

Claims

1. Connecting device (1), particularly quick-connect device for connecting fluid lines, with a first connecting element (2) that includes a line channel (4) and that features an annular receptacle space (15) with an annular, axial sealing surface (17) and a radial sealing surface (18), wherein the connecting element (2) features an annular first support surface (21) and an inclined surface (44), with an annular sealing element (19) that is arranged in the receptacle space (15) and that contacts the sealing surfaces (17, 18), with a second connecting element (3) that includes a line channel (5) and that features an annular, axial sealing surface (23) for the sealing element (19) and an annular second support surface (24) that contacts the first support surface (21) in the assembled state of the connecting device (1), and with a wedge-clamping device (28, 2, 2a) with a wedge element (28) that features at least one wedge (31) with a wedge surface (34) for axial clamping of the connecting elements (2, 3) against each other, wherein the wedge surface (34) of the wedge (31) and the inclined surface (44) of the first connecting element (2) contact each other in the assembled state.

2. Connecting device according to Claim 1, characterized in that the annular sealing element (19) is an O-ring.

3. Connecting device according to Claim 1, characterized in that the radial sealing surface (23) of the first connecting element (2) contacts the sealing surface (18) of the second connecting element (3) without a gap when the connecting elements (2, 3) are clamped against each other.

4. Connecting device according to Claim 1, characterized in that the support surfaces (21, 24) are planar surfaces.

5. Connecting device according to Claim 1, characterized in that the wedge-clamping device (28, 2, 2a) includes a holder body (2, 2a) that features at least one clamp opening (38, 39) arranged perpendicular to its longitudinal direction (16), where a clamping wedge (31, 32) can be inserted into this opening.

6. Connecting device according to Claim 5, characterized in that the holder body (2, 2a) features two parallel clamp openings (38, 39) and the clamp openings (38, 39) enclose the fluid channel (4, 5) between each other.

7. Connecting device according to Claim 5, characterized in that the clamp openings (38, 39) are formed by grooves.

8. Connecting device according to Claim 7, characterized in that the grooves are wedge grooves.

9. Connecting device according to Claim 1, characterized in that the second connecting element (3) features an annular flange (22) with a clamping surface (27) for the clamping wedge (31, 32).

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11. Connecting device according to Claim 1, characterized in that the clamping wedge (31, 32) is made from plastic.

12. Connecting device according to Claim 6, characterized in that each clamp opening (38, 39) is associated with a clamping wedge (31, 32) and the two clamping wedges (31, 32) are connected by a crosspiece (33).

13. Connecting device according to Claim 1, characterized in that a support device (21) is arranged at the connecting element (2).

14. Connecting device according to Claim 1, characterized in that between the connecting elements (2, 3) there is a support device (19b) that is unconnected to the connecting elements (2, 3).

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